

### REMARKS

This is in response to an Office Action that was mailed on May 19, 2009. Claims 47-66 were pending in that action. All claims were rejected. With the present response, claims 48-54, 57-62 and 66 are cancelled. Claims 47 and 63-65 are amended. New claims 67-71 are added.

Beginning on page 2 of the Office Action, claims 47-52 and 57-59 were rejected under 35 U.S.C. §102(b) as being anticipated by an article attributed to Palmer. Beginning on page 5 of the Office Action, claims 53, 54, 60 and 61 were rejected under 35 U.S.C. §103(a) as being unpatentable over the Palmer reference in view of U.S. Patent Publication No. 2002/0052901, which is attributed to Guo. Beginning on page 6 of the Office Action, claims 55, 56 and 62 were rejected under 35 U.S.C. §103(a) as being unpatentable over the Palmer reference in view of an article attributed to Haizhou. Beginning on page 7 of the Office Action, the Examiner rejected claims 63, 64 and 66 under 35 U.S.C. §103(a) as being unpatentable over the Palmer reference in view of an article attributed to Dien. Beginning on page 8 of the Office Action, the Examiner rejected claim 65 under 35 U.S.C. §103(a) as being unpatentable over the Palmer reference in view of the Dien reference and further in view of the Guo reference. For reasons that will be discussed in detail below, it is respectfully submitted that the pending claims are allowable over the cited combination of references considered independently or in combination.

With the present response, Applicant has amended claim 47 substantially. This independent claim now requires generating a quantitative value that is based on how frequently person name type indications for words in the claimed output match identical corresponding pre-defined word type indications assigned to the same words in the claimed test corpus.

In the latest Office Action, the Examiner has transitioned to the Palmer reference as the primary basis for rejection. Applicant invites the Examiner to look closely at the generation of statistics in this reference. The statistics generated have absolutely nothing to do with any level of precision with which word type indications have been applied, let alone the very specifically claimed location name type indications. The statistics generated in the Palmer reference relate to an accuracy with which word segmentation occurs. Generally speaking, the statistics relate to nothing more than the percentage of words in an output that also occur in a corresponding segmented version of a test reference. The statistics have nothing to do with quantifying a level of precision with which word type indications have been applied, let alone the specifically recited location type indications.

The Examiner seems to be focused on the Palmer reference at page 177 where it describes recognition of idiomatic expressions, derived words, Chinese person names, and foreign proper names. Notably, this is described simply in the context of the effect on segmentation accuracy. There is nothing in the reference that teaches or suggests applying tags to identify which sub-set of words are person names, location names and the like. Precision is defined relative to occurrence in a target set of words. Precision is not defined as how accurately certain sub-sets of words are identified as being location names, organization names, etc. None of the references cited in the Office Action, considered individually or in combination, recite the elements of claim 47. For at least these reasons, it is respectfully submitted that claims 47, 55 and 56 are in condition for allowance.

Moving on, it is noted that certain embodiments of Applicant's invention as described in the Specification as originally filed pertain to the segmentation of text into sequences of characters, each sequence being associated with a morphological tag. This tagged sequence is then used to train a language model. The model, in one embodiment, is used to compute a likelihood of succession sequences appearing in a text string and can provide an output indicative thereof.

With that in mind, it is noted that with the present response Applicant has amended claims 63-65 such that the claimed output of unsegmented text also includes an

indication of a combination of parts that form a morphologically derived word included within the unsegmented text. Still further, the claimed output is also limited to including an indication of a part of speech for the combination of parts. Still further, the output must include an indication that the morphologically derived word demonstrates characteristics consistent with a morphological pattern of an affixation type.

The Examiner argues that the Dien reference teaches generation of morphologically derived parts. However, the passages pointed to by the Examiner (i.e., section 4.1.5) do not include morphological components. Certainly, there is no teaching or suggestion of an indication consistent with a morphological pattern of an affixation type. For at least these reasons, it is respectfully submitted that claim 63 is in allowable. Notably, dependent claim 67 further restricts the morphologically derived characteristics as being an affixation of a plural affix to a noun. There is absolutely no teaching or suggestion in the cited references of any morphological output as claimed that includes an affixation type indication of a plural affix applied to a noun. For all of these reasons, it is respectfully submitted that claims 63-65 and 67 are in allowable form.

With the present response, Applicant has added new claims 68-71. These claims are similar to claim 64 but are instead focused on a morphological pattern that is a reduplication type. In dependent claim 71, the reduplication indication is very specifically claimed as being an indication that the morphologically derived word demonstrates characteristics consistent with transformation of an original word consisting of a pattern of characters into another word also consisting of the pattern of characters. There is absolutely no teaching or suggestion in the cited references of elements consistent with new claims 68-71.

In summary, it is respectfully submitted that claims 47, 55, 56, 63-65 and 67-71 are in condition for allowance. Favorable action is respectfully solicited. The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

MICROSOFT CORPORATION,

By: /christopher l holt/  
Christopher L. Holt, Reg. No. 45,844  
One Microsoft Way  
Redmond, WA 98052-6399  
Phone: (425) 707-9382

CLH: rkm